

| Ref # | Hits | Search Query   | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------|------------------|---------|------------------|
| L1    | 1874 | (385/37).CCLS  | USPAT                  | OR               | OFF     | 2005/03/30 14:16 |
| L2    | 756  | (385/37).CCLS  | US-PGPUB; USOCR        | OR               | OFF     | 2005/03/30 14:16 |
| L3    | 1225 | (L1 OR L2) AND ((index or indexes or indices) near2 (change or changes or changing or changed or changeable or changeable or tune or tunes or tuning or tuned or tunable or control or controls or controlling or controlled or controllable or alter or altered or altering or altered or alteration or varies or varied or varying or vary or variable or adjust or adjustable or adjusting or adjusted or adjusts)) | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:16 |
| L4    | 1874 | (385/37).CCLS.   | USPAT                  | OR               | OFF     | 2005/03/30 14:16 |
| L5    | 756  | (385/37).CCLS  | US-PGPUB; USOCR        | OR               | OFF     | 2005/03/30 14:16 |
| L7    | 1045 | (4 or 5) not 3   | USPAT                  | OR               | OFF     | 2005/03/30 14:16 |
| L8    | 1405 | (4 or 5) not 3   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:17 |
| L9    | 266  | (385/10).CCLS.   | USPAT                  | OR               | OFF     | 2005/03/30 14:17 |
| L10   | 49   | (385/10).CCLS  | US-PGPUB; USOCR        | OR               | OFF     | 2005/03/30 14:29 |
| L11   | 2    | ("20020176088"   "6567573").PN. OR ("6816650").URPN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:19 |
| L12   | 1916 | (385/27.30).CCLS.  | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:30 |
| L13   | 843  | 12 and (grating or gratings)   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:30 |
| L14   | 680  | (13 not (3 or 9 or 10))  | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2005/03/30 14:47 |

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|-----|------|--|--|----------------------------|----|-----|------------------|
| L15 | 1189 | 8 not (9 or 14)  |  | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 14:48 |
| L16 | 123  | 15 and (electrode or electrodes)   |  | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 14:50 |
| L17 | 7    | ((optical or optic or light) near2 (waveguide or waveguides or waveguiding or guide or guides or guiding)) and ((grating or gratings) with (fill or filled or filling or fills)) and (electrode or electrodes) |  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/30 14:57 |
| L18 | 210  | ((optical or optic or light) near2 (waveguide or waveguides or waveguiding or guide or guides or guiding)) and ((grating or gratings) with (fill or filled or filling or fills)) and (electrode or electrodes) |  | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 14:52 |
| L19 | 547  | ((optical or optic or light) near2 (waveguide or waveguides or waveguiding or guide or guides or guiding)) and (grating or gratings) and (electrode or electrodes)   |  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/30 14:57 |
| L20 | 195  | 19 and (index)   |  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/30 15:08 |
| L21 | 0    | ((hidden adj relief) with (modulation))  |  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/30 15:08 |
| L22 | 1    | ((hidden adj relief) with (modulation))  |  | US_PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 15:08 |
| L23 | 352  | relief adj grating   |  | US_PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 15:09 |
| L24 | 100  | 23 and (electrode or electrodes)   |  | US_PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 15:12 |
| L25 | 56   | relief adj grating   |  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/30 15:09 |
| L26 | 4016 | ((liquid adj crystal) or liquid_crystal or ((liquid adj crystalline) or LC) with (grating or gratings))  |  | US_PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 15:13 |

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|-----|------|--|---|----|-----|------------------|
| L27 | 2227 | ((liquid adj crystal) or liquid-crystal or (liquid adj crystalline) or LC) with<br>(grating or gratings))                                | EPO; JPO;<br>DERWENT;<br>IBM_TDB                                  | OR | OFF | 2005/03/30 15:13 |
| L28 | 830  | ((liquid adj crystal) or liquid-crystal or (liquid adj crystalline) or LC) with<br>(grating or gratings)) same (electrode or electrodes) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/30 15:13 |
| L29 | 156  | 28 and ((optical or optic) near2 (waveguide or waveguides or waveguiding))   | US-PPGUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/30 15:26 |
| L30 | 4    | ((4097117) or (4227769) or (4986624) or (6058226)).PN.   | USPAT   | OR | OFF | 2005/03/30 15:26 |
| L31 | 635  | ((grating or gratings) near2 (cladding or clad))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/30 15:27 |
| L32 | 526  | 31 and (index)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/30 15:27 |
| L33 | 163  | 32 and (electrode or electrodes)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/30 15:27 |
| L34 | 160  | ((blazed) near2 (grating or gratings)) and photodetector   | USPAT   | OR | OFF | 2005/03/30 16:19 |

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| L35 | 19 | ("4693547"   "4747649"   "5133027"   "5136669"   "5333216"   "5416866"   "5495543"   "5517589"   "5621828"   "5710849"   "5859941"   "5887103"   "5937129"   "6072925"   "6101302"   "6385363"   "6408116"   "6549708").PN. OR ("6731840").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/03/30 16:24 |
| L36 | 0  | 35 and blazed  | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/03/30 16:25 |

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|-----|-----|---|------------------------------|----|-----|------------------|
| L37 | 132 | (US-20040151434-\$ or US-20030138209-\$ or US-20040208466-\$ or US-20040208466-\$ or US-20040170356-\$ or US-20040062481-\$ or US-20040037503-\$ or US-20040037495-\$ or US-20040022489-\$ or US-20030147617-\$ or US-20030133658-\$ or US-20040022489-\$ or US-20030059150-\$ or US-20030053753-\$ or US-20030123773-\$ or US-20030039442-\$ or US-20020150337-\$ or US-20020041734-\$ or US-20020018620-\$ or US-20010031122-\$ or US-20030152126-\$ or US-20030123798-\$ or US-20040218275-\$ or US-20030137706-\$ or US-20040228574-\$ or US-20040146248-\$).did. or (US-20030152323-\$ or US-20020131694-\$ or US-20030128918-\$ or US-20040233962-\$ or US-20040057483-\$ or US-20030040134-\$ or US-20040109234-\$ or US-20020048290-\$ or US-20020186919-\$).did. or (US-6661942-\$ or US-4743083-\$ or US-6865310-\$ or US-6829073-\$ or US-6826333-\$ or US-6795616-\$ or US-6282341-\$ or US-5058977-\$ or US-4622663-\$ or US-6771844-\$ or US-6763165-\$ or US-6731840-\$ or US-6618116-\$ or US-6271966-\$ or US-6628850-\$ or US-6215928-\$ or US-6625349-\$ or US-6522795-\$ or US-6259847-\$ or US-6236773-\$ or US-5859941-\$ or US-6365428-\$ or US-6104739-\$ or US-5082629-\$ or US-4986624-\$ or US-4006963-\$).did. or (US-6650799-\$ or US-6628861-\$ or US-6603902-\$ or US-5875272-\$ or US-5805751-\$ or US-5410622-\$ or US-4268116-\$ or US-3891302-\$ or US-6549708-\$ or US-6101302-\$ or US-5937129-\$ or US-5887103-\$ or US-5710849-\$ or US-5621828-\$ or US-5517589-\$ or US-5495543-\$ or US-5416866-\$ or US-5333216-\$ or US-4747649-\$ or US-6327413-\$ or US-6307989-\$ or US-6285812-\$ or US-6192177-\$ or US-6151438-\$ or US-6111999-\$ or US-6104852-\$ or US-6097862-\$).did. or (US-5995697-\$ or US-5805750-\$ or US-5436991-\$ or US-5303316-\$ or US-5276748-\$ or US-5195161-\$ or US-5131060-\$ or US-6816650-\$ or US-6801348-\$ or US-6597838-\$ or US-6449411-\$ or US-6144480-\$ or US-RE36710-\$ or US-6034809-\$ or US-5668900-\$ or US-4707059-\$ or US-6445838-\$ or US-6434296-\$ or US-6088495-\$ or US-5189714-\$ or US-4974930-\$ or US-4737007-\$ or US-6320990-\$ or US-6567573-\$ or US-6353690-\$ or US-5875053-\$ or US-6801690-\$).did. or (US-6143208-\$ or US-5657407-\$).did. or (JP-2004279506-\$ or JP-2002006135-\$ or JP-09304750-\$ or JP-2002057405-\$ or JP-2000182764-\$ or JP-02287441-\$ or JP-58158983-\$ or JP-58158987-\$ or JP-03051826-\$ or JP-63235904-\$ or JP-57035828-\$ or JP-10206620-\$).did. or (US-20040151433-\$ or US-20040057483-\$ or JP-2004085212-\$).did. | US-PGPUB;<br>USPAT;<br>USOGR | OR | OFF | 2005/03/30 16:25 |
| L38 | 4   | 37 and blaized  | US-PGPUB;<br>USPAT;<br>USOGR | OR | OFF | 2005/03/30 18:45 |

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|-----|------|---|-----------|----|-----|------------------|
| L39 | 1    | ("6628850").PN.   | USPAT     | OR | OFF | 2005/03/30 18:46 |
| L40 | 0    | 39 and photodetector  | USPAT     | OR | OFF | 2005/03/30 18:46 |
| L41 | 0    | 39 and detectors  | USPAT     | OR | OFF | 2005/03/30 18:46 |
| L42 | 0    | 39 and detector   | USPAT     | OR | OFF | 2005/03/30 18:46 |
| L43 | 1    | (385 37).CCLS.  | USPAT     | OR | OFF | 2005/03/30 18:46 |
| S1  | 1874 | (385 37).CCLS.  | US-PGPUB; | OR | OFF | 2005/03/30 14:16 |
| S2  | 756  | (385 37).CCLS.  | USOCR     | OR | OFF | 2005/03/30 14:16 |
| S3  | 829  | (S1 OR S2) AND ((index or indexes or indices) near2 (change or changes or changing or changed or changable or changeable or tune or tunes or tuning or tuned or tunable or control or controls or controlling or controlled or controllable or alter or altered or altering or altered or alteration or varies or varied or varying or vary or variable or adjust or adjustable or adjusting or adjusted or adjusts)) | USPAT     | OR | OFF | 2005/03/29 21:54 |
| S4  | 1225 | (S1 OR S2) AND ((index or indexes or indices) near2 (change or changes or changing or changed or changable or changeable or tune or tunes or tuning or tuned or tunable or control or controls or controlling or controlled or controllable or alter or altered or altering or altered or alteration or varies or varied or varying or vary or variable or adjust or adjustable or adjusting or adjusted or adjusts)) | US-PGPUB; | OR | OFF | 2005/03/30 14:16 |
| S5  | 74   | S4 and (relief near2 (modulation or grating or gratings))   | USPAT;    | OR | OFF | 2005/03/29 21:55 |
| S6  | 0    | ("2004/0151434").URPN.  | USOCR     |    |     |                  |
| S7  | 11   | ("4327966"   "4622663"   "4914655"   "4955028"   "5058977"   "5561726"   "5706375"   "5724164"   "5774619"   "6031950"   "6282341").PN.OR ("6795616") URPN.   | USPAT     | OR | OFF | 2005/03/29 22:05 |
| S8  | 10   | "385"/\$ccls. and (((liquid adj crystal) or (liquid adj crystalline) or LC) near2 (filled or filling or fills or fill) with (grating or gratings))  | US-PGPUB; | OR | OFF | 2005/03/29 22:19 |
| S9  | 33   | (((liquid adj crystal) or (liquid adj crystalline) or LC) near2 (filled or filling or fills or fill)) with (grating or gratings))   | USPAT;    | OR | OFF | 2005/03/29 22:21 |

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|-----|-----|--|----------------------------|----|-----|------------------|
| S10 | 26  | ((((liquid adj crystal) or ((liquid adj crystalline) or LC) near2 (filled or filling or fills or fill)) with (grating or gratings))  | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/29 22:25 |
| S11 | 5   | (waveguide or waveguides) and ((filled or filling or fills or fill) near2 (grating or gratings))   | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/03/29 22:26 |
| S12 | 156 | (waveguide or waveguides) and ((filled or filling or fills or fill) near2 (grating or gratings))   | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/29 22:26 |
| S13 | 5   | ("5611004"   "5832148"   "6215928"   "6330383"   "6389199").PN.OR ("6628850").URPN.  | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/29 22:31 |
| S14 | 10  | ("5859941"   "6201909"   "6236773"   "6259847").PN. OR ("6522795").URPN.   | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/29 22:31 |
| S15 | 25  | ("20010021294"   "4006963"   "4400056"   "4721352"   "4807950"   "4986624"   "5007705"   "5016967"   "5060307"   "5410622"   "5412743"   "5446809"   "5574807"   "5699468"   "5781670"   "5805751"   "5809188"   "5875272"   "5883990"   "5926300"   "5946430"   "5982963"   "6167169"   "6324204"   "6510256") PN. OR ("6603902").URPN. | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 10:21 |
| S16 | 31  | ("3891302"   "4268116"   "4358851"   "4749246"   "4781428").PN. OR ("4986624").URPN.   | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 10:42 |
| S17 | 18  | ("4747649"   "5333216"   "5416866"   "5495543"   "5517589"   "5621828"   "5710849"   "5859941"   "5887103"   "5937129"   "6072925"   "6101302"   "6408116") PN. OR ("6549708").URPN.   | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 10:44 |
| S18 | 6   | ("5082345"   "5319733").PN. OR ("6151438").URPN.   | US-PGPUB; USPAT; USOCR     | OR | OFF | 2005/03/30 10:54 |